Statement of Art Glasgow

Chief Technology Officer, Ingenix

Before the PCAST Report Workgroup

February 15, 2011

On behalf of my colleagues at Ingenix, I am pleased to present my thoughts to the Workgroup regarding the President's Council of Advisors on Science and Technology (PCAST) report entitled "Realizing the Full Potential of Health Information Technology to Improve Healthcare for Americans: The Path Forward".

I offer these comments based on our experience in developing and delivering innovative solutions through our electronic health record (EHR) and health information exchange (HIE) technologies, as well as our parent company's health plan offerings in the commercial, Medicare, and Medicaid markets across the country.

Ingenix supports the efforts of the Workgroup to delve further into the issues raised by PCAST and how they might relate to the Meaningful Use program. We also support more aggressively implementing health information technology and information exchange and believe the PCAST recommendations, if implemented, would assist in this effort.

Ingenix: A Unique Perspective On Information, Technology and Exchange

- Ingenix is one of the largest health care information, technology, services, and consulting companies in the world. With more than 14,000 employees worldwide and over $2.2 billion in revenue, Ingenix provides software and services to major participants in the health care industry.

- Ingenix understands and **directly serves the care provider community** like few others, with more than 240,000 direct physician clients and nearly 6,000 hospital clients to whom we provide data, software, services, and consulting.

  In addition to understanding the provider perspective, Ingenix brings the **payer, life sciences, government, and employer perspectives** – both to policy questions and to our day-to-day work with the provider community. Ingenix supplies information, software, services and consulting to 334 state and federal government agencies; more than 2,000 health plans; more than 2,000 life sciences companies; and more than 100 major employers in the U.S.

- As an independent subsidiary of UnitedHealth Group, we have affiliate companies with leading market positions in the commercial health plan market, the Medicaid market, the Medicare market, the behavioral health and ancillary benefit market, the patient care management market, and the pharmacy benefit manager market. All of this provides us with end-to-end insight into the daily operations of the health care market place.

- Our **innovation in the use of health information** is what we are best known for. As examples, we have over 200 decision-support software products; have created and maintain the leading methodology for measuring cost and quality of episodes of care; and provide information for 730 million online consumer provider searches annually.

- Through our **CareTracker physician practice** offering, we have developed leading software and services which allow physicians, usually in very small practices, to manage

all the functions of their practice end-to-end, including an ONC-ATCB-certified EHR. The entire suite of services is offered through the web, as software-as-a-service. CareTracker provides access to the critical applications physicians need to manage their populations, treat patients, connect and coordinate care, manage their back office and become eligible for MU incentive payments.

- Our **Health Information Exchange** product through our subsidiary Axolotl, a leading provider of HIE services, is best in class technology that enables clinical exchange of information in multiple local, state and regional markets. No other vendor currently powers as many RHIOs and statewide HIEs than Axolotl.

UnitedHealth Group, Ingenix's parent company, recently submitted comments on the PCAST report on their recommendations and responded with our own suggestions. Among our recommendations and comments, we believe that in order to be successful, HHS should:

- Promote and enhance systemic administrative interoperability to help promote clinical exchange;
- Not finance health information exchange and the attendant infrastructure with new taxes on industry;
- Rework privacy and security rules to promote individual preferences for privacy protections within the model for clinical exchange of health information;
- Leverage existing systems, standards and standards development processes and experts to advance clinical information exchange;
- Use tools and lessons learned from other industries in promoting interoperability; and
- Provide clarity in important areas of PCAST's recommendations.

Ingenix believes that if these suggestions were adopted, the model suggested by PCAST holds tremendous potential to radically accelerate clinical information exchange in the near term, thereby promoting the flow of information to and between providers that could dramatically improve treatment, the quality of services delivered and patient outcomes.

1. **Summarize your understanding of key points in the PCAST Report and how these recommendations would work in the health care environment.**

Ingenix supports the Administration's actions to improve health care through the meaningful use of technology and the exchange and use of information. We agree with PCAST's conclusion that efforts to date have lacked the aggressiveness necessary for systemic and behavioral discipline that would dramatically improve the care, quality and cost outlook.

PCAST has suggested use of a tagged data model for exchange of health information. To achieve this, PCAST suggests the adoption of a universal exchange language to allow for transfer of health data while maximizing privacy protections. PCAST believes that Federal leadership is needed to create the infrastructure necessary to support such a model. Additionally, the report recommends that CMS and ONC should ensure the development of this capability by redirecting the focus of the meaningful use program from data collection of specified lists of health measures to higher levels of data exchange and the increased use of clinical decision

supports. This can be achieved through a clear, common framework and by transitioning from traditional EHRs to a system wide exchange model that uses tagged data elements and universal exchange language.

PCAST makes some additional recommendations including:

- CMS should modernize and restructure its existing IT platforms to engage in sophisticated exchange of health information from multiple sources and to drive major progress in health IT by 2014. This should be a more urgent priority for the Administration and Congress and should be funded as an essential component of health care quality and affordability modernization.

- Integrate and align information systems through the government's public health agencies (FDA, CDC, NIH, and AHRQ) and benefit payment systems (CMS and VA).

- The FDA and other HHS public agencies should enable medical researchers to gain access to de-identified, aggregated, near real-time medical data by using data elements across services for comparative effectiveness research.

- Medicare quality reporting by MA, physicians and hospitals should be incentivized and collected in a tagged data element model.

In terms of the health care environment, we know that the information flow enabled by technology holds vast potential for helping care-givers improve patient outcomes while reducing costs. Yet, we also know that incentives that simply promote use of technology and produce reports will not necessarily increase productivity or improve health care results. We suggest the PCAST report's recommendations, paired with the three premises summarized below, would promote an aggressive program to achieve a high value system.

- **Put Useable Information in the Workflow.** While common estimates show that compliance with evidence-based treatment guidelines is less than 50%, our analysis shows that a large majority of the time, the proper information in the proper hands at the proper time, will, in fact, improve outcomes. Only a small percentage of the time are lagging outcomes a matter of insufficient physician expertise. Better information creates better care. The PCAST recommendations would provide greater liquidity to data, thereby facilitating and improving the quality of information to make better decisions.

- **Invest in Content, Connectivity and Access.** Developing an infrastructure to support effective use of health IT to improve consistency of treatments, facilitate healthier patient choices, and reduce administrative waste requires three pillars: (a) the development of valuable *content*; (b) consistent, efficient, and secure *connectivity*; and (c) low-cost *access* to information for the provider at the right place and the right time. Policies that maximize the tipping points and account for dependencies in these three areas will ultimately be the most successful. We believe PCAST's recommendations hold the potential to achieve these goals and that a tagged data model will support all three aims.

- **Focus on Services for Providers.** People, physicians included, seldom adopt technology for the sake of adopting technology; they use services that improve their lives. Rarely do individuals seek to transform the way they do things without good reason – even with third-party incentives. People do, however, very frequently adopt new services that solve real problems for them – often through applied technology. When this happens successfully, the technology platform itself is in the background and the service is in the foreground, as is the case with so many of the commonly used technology applications today: on-line banking, ATMs, and on-line travel. A tagged data model that simplifies workflows will gain mass adoption by attacking common provider problems and creating obvious benefits.

Without robust health information exchanges for aggregation and dissemination, generations of valuable health information will be strictly limited. Today, health information exchanges (HIEs) are struggling to gain the right infrastructure, governance, and operating principles for long term sustainability. We believe that a sustainable HIE business model is achievable, but that the model will need to simplify all the information flows into and out of a provider's workflow, combining administrative and clinical information exchange.

Administrative data payments can become a sustaining model that supports clinical data services. Making data available to third parties for enriched analytics at the point of care should provide a further case for business sustainability. Decision support and information exchange must be built with a focus on delivering value, not just data, to health care providers.

We suggest three guiding principles:

- Common technical standards for administrative and clinical data use and exchange; these standards should seek to treat both types of information jointly rather than separately.

- Common technical tagging standards and the associated technology of all stakeholders – HIEs, payers, clearinghouses, gateways, physicians, vendors, government – and including privacy and security oversight for the whole health care system.

- Broaden Meaningful Use to go beyond technical standards for exchange and interoperability of data to allow for actionable intelligence that provides answers at the point-of-care, including near real-time data through a tagged model.

The presence of rapidly adopted technical standards will answer only one of many questions that need to be addressed prior to implementation of the PCAST recommendations. It is reasonable to establish standards for metadata in a top down manner, as it may well accelerate adoption and meaningful use of EHRs and HIEs.

With a tagged data model and easy to use technology, providers could simply submit queries to data service providers and receive actionable information back regarding a patient's medical history and current treatment protocols. Existing standards, such as the HL7 v3, can be readily used to achieve a common link between the query and the response. The standard exists currently, can be built into the Meaningful Use model and would provide a ready basis for

provider service delivery. Thus, the information necessary before, during and after treatment used for clinical services and administrative functions can be combined within a complete EHR product for use within the construct of a tagged data model.

It will be critically important to incent providers to embrace a tagged data model by making the upfront technology simple and easy to use. To this end and so long as the standards for exchange are uniform, vendors can ensure technology platforms that help simplify provider workflow. This will make provider compliance with Meaningful Use part of the workflow, rather than a must-complete task list that may or may not be directly relevant to a provider's daily routine. The PCAST recommendations hold the best promise we have seen to date to achieve this goal.

Ingenix believes, therefore, that a reasonably constructed information exchange model that encompasses uniform standards and common use rules would add value to administrative and clinical data flows and would obviate the need for new taxes on insurers or the public to finance the infrastructure. We take great exception to PCAST's assumption that new taxes are necessary to fund the system because that view fails to acknowledge demand for, and a market in, a value added exchange model. HHS could, through appropriate guidance and rules, establish a structure that is sustainable, meets real world needs and drives standards of care ever higher. We believe such a system will be self-sustaining. A system built on industry taxes will, in our view, promote proprietary interests and continued siloed systems that neither promote exchange, nor advance a high value health system. We strongly recommend abandoning the new taxes approach suggested in the PCAST report.

2. What Parts of the PCAST Recommendations can be achieved in the 2013 timeframe? 2015?

Whether the timeframe is 2013 or 2015, we believe it is important to understand that the end state envisioned by PCAST represents a large scale change in both HIT architecture and provider adoption culture. This industry is marked by slow change in technology fueled, in part, by misaligned financial incentives and the inability of many systems to integrate smoothly into provider processes and workflows. From a workflow and contextual relevancy standpoint, semantic interoperability of the data does matter. While it may be possible one day to ensure this semantic consistency at an individual data element level, we believe that within the 2015 timeframe, it is unlikely this can be achieved on a national level. Current industry approaches utilize a document framework to assist in meeting this need and we do believe that melding the PCAST approach with selected document frameworks, which are XML based and well suited to the concept, provides a path forward. Likewise, the current MU program provides an incentive framework intended to spur adoption and use of certified EHR systems and HIE capabilities within the provider community. The support of XML based document standards for interoperability and exchange should be included in the MU guidelines as a means of encouraging and supporting industry movement. We encourage the committee to consider that a complete, end to end view of interoperability will eventually be required to enable the type of change PCAST envisions. This requires a view wider than just the provider market.

What aspects of the PCAST report are consistent with your approach to interoperability? What represents a change in direction? Do you have alternate suggestions to accomplish the same goals?

Ingenix agrees that all EHRs, HIEs and modules/applications should be interoperable and believe that the development of a universal metadata model applied across commercial and public programs is necessary. Our approach to interoperability assists providers to exchange information and to perform functions as part of provider work flow and are far less task oriented than the current Meaningful Use standards. We believe the goal should be "plug and play" in conformant tools.

We agree with PCAST's suggestion that interoperability be a primary requirement for Stage 2 functionality. ONC should constrain the "universal exchange language" by limiting it to HL7 v3 CDA for clinical content. This would require phasing out NHIN Lite non-computable formats that poorly position primary care providers and detracts from the expectation of their central role in reform and redesign. Most of the functionality of Stage 2 should be rendered using HL7 v3 CDA. Other standards that have computable elements may be appropriate for selected tasks, such as the Medbiquitous Provider Profile to support physician participation in practice improvement programs.

3. **How should ONC implement the basic concepts/directions that are described in the report? (not to operational suggestions, but directional).**

To achieve a high value system, ONC should focus on putting useable information in the workflow, including investing in content, connectivity and access, and focus on services for providers.

To facilitate the integration of useable data into provider workflows, ONC should develop infrastructure to support effective use of health IT to improve consistency of treatments, facilitate healthier patient choices, and reduce administrative waste.

To accomplish these goals ONC must focus its infrastructure development efforts on ensuring consistent, efficient, and secure connectivity as well as low-cost access to information for the provider at the right place at the right time.

In implementing the PCAST recommendations it is critical that we do not become myopic in encouraging provider and national implementation. We believe that administrative capabilities of EHR systems are an important feature that will take EHR adoption beyond adoption to full integration into provider practices. To facilitate this we believe that ONC should work with HHS to use Medicare and Medicaid payment incentives to encourage payers to use standards. Payers are willing to participate in this evolution of information exchange if the model promotes significant adoption and behavior change by providers.

4. **Are there ways to meet PCAST objectives in an iterative, incremental approach?**

Ingenix believes the PCAST report represents an aggressive approach and fundamental acceleration of the Meaningful Use program and efforts to promote health information exchange. We also believe PCAST has accurately assessed some of the barriers to widespread adoption of health information exchange.

The recommendations of the PCAST report, while representative of a needed increase in interoperability and exchange capabilities in EHR systems, will require a non-trivial effort to implement. We believe that integration of the PCAST objectives can be done iteratively but that does not mean that it must be done slowly. ONC should focus on robust quality enhancement and outcomes, the integration of payment and delivery models into the Meaningful Use program, a top-down method for defining metadata standards, as well as a framework for consumers to provide meaningful consent.

In accomplishing these goals we suggest not starting with the IT requirements but rather measures that require transformation and optimization of workflow. Measures to address coordination of care issues are a first step in enhancing the quality measures set in the Meaningful Use program. We agree with PCAST that the current Meaningful Use condition-specific measures are appropriate to assess population health, but they are not adequate to drive rapid and robust quality enhancement and outcomes improvement at the individual physician level. The system should provide feedback to providers to allow them to gauge their competency vis-à-vis their peers. We believe that quality measures should be combined with clinical decision support tools to allow real time feedback to providers.

Ingenix recommends that ONC not reinvent the wheel, but rather leverage the appropriate existing ANSI-accredited Standards Development Organizations (SDOs) to develop a framework for a universal exchange language. Initially, standard data elements and metadata tags should be identified for the framework. Naming conventions and unambiguous definitions are essential. Once the standards process is determined, input from any impacted entity should be solicited and considered in a transparent and participatory process that fosters development from request to standard. We believe, however, that SDOs lack the required resources for this scope of work and that HHS should fund these efforts via grants and contracts. The funding requirements should include documentation of the methods for designing sustainability.

In terms of the specific technical standards, we believe HL7 v3 R2 CDA documents can incorporate LOINC ontology and object identifier (OID) codes which can be used to address several suggestions made in the PCAST report: 1) creating the library catalog of the numerous templates required to address corresponding use cases; 2) implementing tagging of specific content in consumer documents to address their privacy preferences; 3) automating archiving, searches and retrieval of data for real time delivery to clinicians or researchers; 4) automating administrative simplification strategies; 5) communicating coordination of care information; and 6) providing structured data for risk adjusted and outcomes based reimbursements. ONC could also iteratively and rapidly map existing semantic taxonomies into tagged data elements could be driven by SDOs, but should also include collaboration with EHR vendors. There should be some incentive or regulatory mandate for vendor participation that will accelerate progress in this area.

We believe that unique identifiers are necessary to operationalize the recommendations, as discussed above. The majority of the serious errors documented in IOM reports and elsewhere can be attributed to misidentification of patients. While identifying algorithms can identify unique individuals, errors are well known, and these errors will become more critical as decisions are based on identified data. Errors are also more likely to increase as the volume of transactions increases. Consumer protections are enhanced by identifiers because they and monitoring entities can more readily find anomalous data that may represent identity theft, inappropriate use or inaccuracies.

Establishing a taskforce with deadlines to establish these standards will be necessary. The ONC could oversee the creation of these standards but potentially leverage HL7 and HITSP workgroups as well as the SDOs and establish a dedicated taskforce of clinical and technical experts.

Ingenix stands ready to assist in this process.

Items for Clarification

To assist industry, providers and indeed all stakeholders better understand what may be required of them as ONC seeks to determine what aspects of a tagged data model it may fold into MU, Ingenix suggests providing clarity in a number of areas. We believe ONC should clarify whether standards will apply to clinical data alone, rather than to all electronic health data that might be moved among business partners for a wide variety of non-clinical purposes, such as payment or healthcare operations. This will help define the universe of data subject to the model.

In addition, PCAST's recommendations, if fully implemented, will require a higher degree of patient/consumer engagement than has been required for our existing data rules. Given Ingenix's long-time commitment to transparent and actionable information for consumers, we agree that higher levels of consumer engagement are important. However, the practical implications of documenting consumer privacy preferences, and the potential unintended consequences, require more detailed examination before being fully embraced. One concern is that an imbalanced rules system or poor operationalization could impede lower costs, higher quality or patient focused care. For example, if many consumers opt for the highest level of privacy protection, even if this interferes with their provider's ability to effectively deliver care, important system wide degradation might result. At the very least it might result in duplicative tests, imaging, etc. because information might not be available to the treating professional. The number of providers willing to use such a system might be negatively impacted, thereby making realization of the policy objectives behind HITECH and the Meaningful Use program more difficult.

Ingenix appreciates the opportunity to present our thoughts and recommendations to you today and I am available to answer any questions you may have. We look forward to working with you to aggressively support adoption of health information technology and enhanced clinical information exchange that lowers costs and improves care outcomes and quality.